



# Wilderness Prints



COMNAVREG MIDLANT NORFOLK  
Regional Environmental Group, Natural Resources  
Editor: Nikki Brown, 757-462-8564

## What Riparian Forest Buffers Mean to You

The Natural Resources Staff installed an interpretive Riparian Forest Buffer (RFB) sign at Lake Bradford as part as their Arbor Day Celebration to increase environmental education opportunities on base. Riparian areas lie adjacent to streams, rivers, bays, or marshes. RFBs are the transitional area where the terrestrial and aquatic habitats meet. They are streamside forests made up of trees, shrubs, and grass plantings, which filters out pollution from stormwater run-off flowing into waterways from adjoining land. Because of this, they are essential to the health of the waters they border and thus the quality of water entering the Chesapeake Bay. Here are a few ways that RFBs accomplish this:

- RFBs filter runoff, the rain that is not absorbed by the soil; this filtering helps settle out sediment, nutrients, and pesticides before they reach the waterways.
- RFBs help with nutrient uptake; Nutrients such as nitrogen and phosphorus (common ingredients in fertilizer) are taken up by the tree's roots.
- Other benefits that RFBs accomplish are that they provide habitat for fish and wildlife. Fallen trees and limbs serve as cover for fish while stabilizing the stream bottom. The tree canopy provides shade that keeps the water cool, which retains more oxygen for aquatic organisms. These areas often serve as critical travel corridors for wildlife foraging for food. And last of all, RFBs help prevent soil erosion by stabilizing the soil.

The Navy, in its effort to increase Riparian Forest Buffers, has also established many "No Mow" signs along these buffer zones throughout Little Creek and Oceana. These signs indicate areas that are valuable buffer zones and by not mowing, we allow growth of native grasses and other native vegetation.



2002

Christmas Tree

Recycling



**The Natural Resources Staff is collecting Christmas Trees to be reused! Recycled Christmas Trees are used to help with dune stabilization on the beaches of Dam Neck Annex and Naval Amphibious Base Little Creek.**

**Trees, free of tinsel, ornaments, and lights may be dropped off at the Natural Resources Center across from the stables on Oceana Blvd. and at the Enlisted Beach at Little Creek from December 26 until January 12.**

**Please call Nikki Brown at 462-8564 ext. 390 for more information.**

**Thank you for your support!**

# Take the Environmental Tree Pop Quiz...

**1. The oldest living organisms on Earth happens to be a rugged tree living in North America. This tree is the:**

- a. giant redwood.
- b. Douglas fir.
- c. pinon.
- d. bristlecone pine.

**2. We all know that trees are important in our daily lives. But how important they are may be grossly underestimated. Our very existence depends on trees and other plants because they:**

- a. provide shade on hot, sunny days.
- b. remove pollutants from groundwater.
- c. provide us with oxygen to breathe.
- d. provide lumber for our homes.

**3. Trees and other plants play a very important role in reducing the effects of global climate change. Trees may help reduce the effects of global warming by:**

- a. reducing carbon dioxide concentrations in the atmosphere.
- b. increasing the oxygen concentration in the atmosphere.
- c. providing more shade in the backyard.
- d. drawing water from the soil.

**4. Through the process of photosynthesis, trees absorb carbon dioxide and water. Using energy from the sun, trees convert these ingredients into chemical energy necessary for survival. The amount of carbon dioxide a tree may remove from the atmosphere to gain one pound is:**

- a. about .5 pounds.
- b. about 1.5 pounds.
- c. about five pounds.
- d. about 10 pounds.

**5. One of the byproducts of photosynthesis is water vapor that trees emit through their leaves in a process called transpiration. The water vapor given off by a tree becomes a critical part of Earth's hydrologic cycle. The amount of water that a tree can extract from the ground in a single growing season is:**

- a. 100 gallons.
- b. 1,100 gallons.
- c. 11,000 gallons.
- d. 100,000 gallons.



## Environmental Tree Pop Quiz continued...

**6. Besides acting as the lungs of the world, trees also provide us with shade, raw materials for building, climate regulation and natural beauty. In the prairie states, trees also serve as windbreaks. The benefits of a windbreak include:**

- a. soil stabilization.
- b. protection of crops.
- c. increased animal protection.
- d. all the above.

**7. Many scientist consider the lost of forests to be the primary threat to our environment. While estimates vary, the amount of original forest habitat that has been destroyed is approximately:**

- a. 75%.
- b. 50%.
- c. 25%.
- d. less than 10%.

**8. One of the oldest trees in existence in terms of geologic time has close ancestors that were alive between 135 million to 210 million years ago and may have provided food for the dinosaurs. This tree is:**

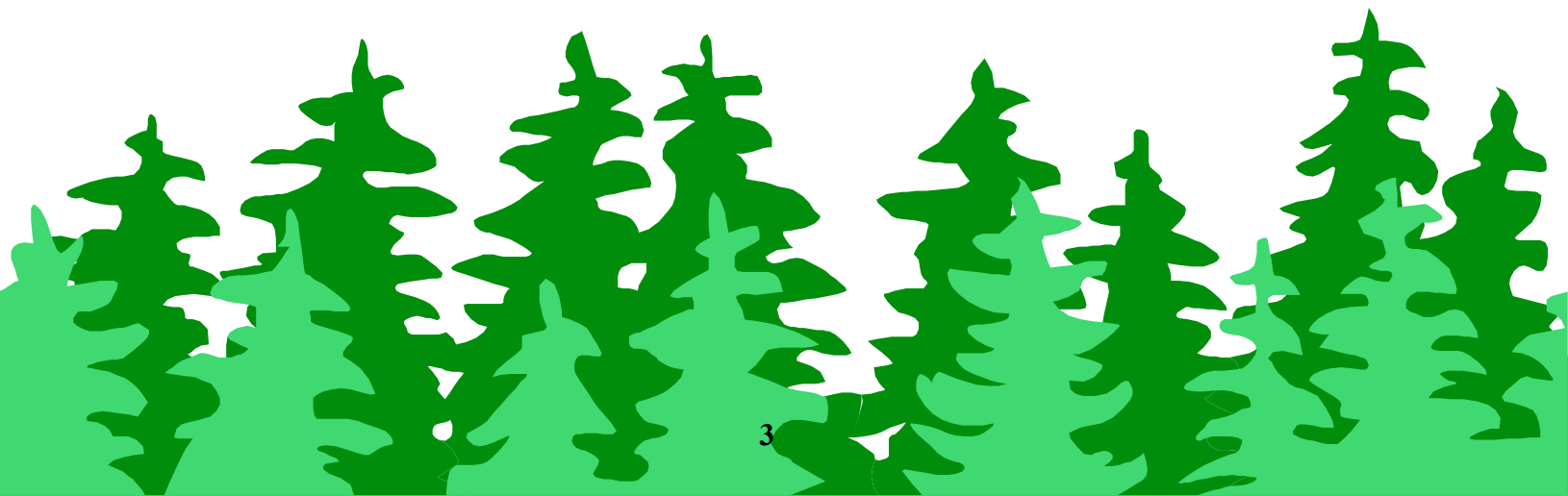
- a. the ginkgo biloba.
- b. the Ponderosa pine.
- c. the Pacific yew.
- d. the acacia.

**9. Measured by circumference, the largest tree in North America is:**

- a. the Western red cedar.
- b. the coast Douglas fir.
- c. the giant sequoia.
- d. the coast redwood.

**10. The tallest tree in North America is:**

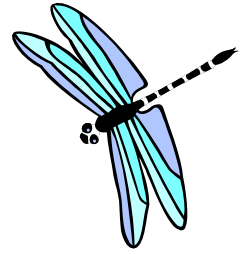
- a. a coast Douglas fir.
- b. coast redwood.
- c. giant sequoia.
- d. grand fir.





## Words of Wisdom...

Wilderness in the elegant words of the 1964 US Wilderness Act, "Where man himself is a visitor and does not remain."



"We must become the change we want to see." -Gandhi

## Winter Care for Wildlife

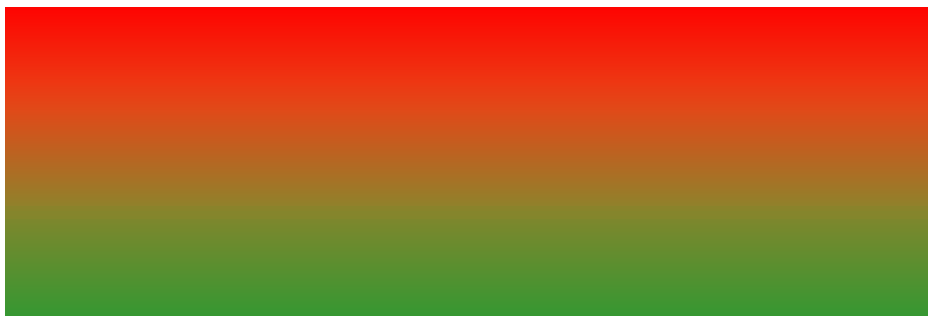
Seeds, nuts, fruit and insects can provide winter food for birds, mammals and other wildlife. In the case of birds, you will want to plant native trees and shrubs that retain their fruits well into the winter months. Here are some suggestions: apples and crabapples, dogwoods, Eastern redcedar, hackberry, hawthorns, mountain ash, sumacs, and viburnums. You will need to check with your local Virginia Cooperative Extension Service (ph#s Virginia Beach 757-427-4769, Norfolk 757-683-2816, and Chesapeake 757-382-6348) to make sure that the trees and shrubs that you plant are native to our area.

In addition, don't forget squirrels and other small mammals. Trees that provide plenty of seeds, nuts, or acorns include:

Good Seed Producers: ashes, birches, firs, maples, and spruces

For nuts and acorns: buckeyes, butternut, black walnut, chestnuts, hazels, hickories, and oaks.

One other consideration...if you have a large property with space where you can leave dead or dying trees that pose no hazard, we suggest leaving them for the birds that need insects for food. Also, these snags create a possible home for cavity nesters or den makers.



## Answers to Pop Quiz:

1.d- More than 4,760 years, the bristlecone pine is the oldest living organism on Earth.

2.c- Most of the oxygen present in the atmosphere is produced by plants.

3.a- Planting trees is one of the most efficient ways to remove excess levels of carbon dioxide from the atmosphere.

4.b- Depending on the age and species, a tree may absorb as much as 1.5 lbs.. Of carbon dioxide for every pound of growth added to the tree.

5.c- The hydrogen from the absorbed water is used to make the chemical energy for the tree.

6.d- An effective windbreak may slow the wind by 25%-75%.

7.b- Approximately half of the original forests have disappeared. Of the remaining temperate and tropical forests, 75% are threatened.

8.a- The ginkgo biloba is relatively unchanged from ancestors that date back to the age of dinosaurs.

9.c- With a circumference of 998 inches and a height of 275 feet, a giant sequoia in Sequoia National Park, California, is the nation's largest tree.

10.b- Measured the World's tallest tree, a 367.5 foot coast redwood dubbed Mendocino Tree. It is located west of Ukiah, California.

**\*\*Tree Pop Quiz provided by the Environmental Network News\*\***